

AMENDMENTS TO THE SPECIFICATION

1. Please add the following new paragraph after line 8 of page 4, immediately before “Description of Preferred Embodiments” of Applicant’s submitted specification:

FIG. 4 is a graph illustrating the relationship between gain factor and forward and backward log-magnitude gradients.

2. Please replace the paragraph at line 2 of page 9 of Applicant’s submitted specification with the following rewritten paragraph:

The forward and backward magnitude ratios are equivalent to log-magnitude gradients and can be as defined as the difference between log-magnitude terms, i.e. $F_g = \log(E_f) - \log(E_c)$ and $B_g = \log(E_c) - \log(E_p)$ respectively. The relationship between gain factor and forward and backward log-magnitude gradients is shown in FIG. 4 ~~Fig. A1~~. In FIG. 4, linear ~~Linear~~ gain is plotted on the ordinate and backward log-magnitude gradient (in dB) is plotted on the abscissa. The gain factor is plotted for different levels of the forward log-magnitude gradient in each of the curves. For any value of the forward log-magnitude gradient, the gain factor reaches some maximum when the backward log-magnitude gradient is approximately 40 dB. The maximum level is dependent on the level of the forward log-magnitude gradient. For the case where the forward log-magnitude gradient is 0 dB, as shown by the dotted line (i.e. at the end a period of rise for a long-duration signal where $E_f = E_c$), the maximum gain possible is 0.5. For the limiting case where the forward log-magnitude gradient is infinitely steep as shown by the dashed line (i.e. rapid-fall in envelope signal where $E_f \ll E_c$), the maximum gain possible is 2.0. The limiting case for the forward log-magnitude gradient is reached when its gradient is approximately -40 dB.